

**SYNTHESIS OF PHOSPHONO-SUBSTITUTED PORPHYRIN COMPOUNDS  
FOR ATTACHMENT TO METAL OXIDE SURFACES**

5

**Abstract of the Disclosure**

A method of making a phosphono-substituted dipyrromethane comprises reacting an aldehyde or acetal having at least one phosphono group substituted thereon with pyrrole to produce a phosphono-substituted dipyrromethane; and wherein the phosphono is selected from the group consisting of dialkyl phosphono, diaryl phosphono, and dialkylaryl phosphono. Additional methods, intermediates and products are also described.

10